WHAT IS CLAIMED IS:

1.   A method for assessing the photo quality of a captured image in a digital camera, said method comprising:

checking, in-camera, the photo quality of the captured image to determine if the photo quality is acceptable; and

providing a corresponding photo quality feedback to a camera user.

2.   The method of claim 1 wherein the checking step comprises:

computing a photo sharpness figure of merit for the captured image; and

comparing said computed photo sharpness figure of merit to a threshold to determine if said photo sharpness figure of merit exceeds said threshold.

3.   The method of claim 2 wherein the computing step comprises:

generating a line pixel profile of the captured image;

computing an absolute difference in a channel gray level between adjacent pixels in the horizontal direction using said line pixel profile; and

picking the maximum absolute difference as the photo sharpness figure of merit.

4.   The method of claim 3 further comprising:

transforming the captured image from RGB color space into YCrCb color space.

5.   The method of claim 3 further comprising:

transforming the captured image from RGB color space into L*a*b* color space.

6.   The method of claim 2 wherein the computing step comprises:

generating a line pixel profile of the captured image;

computing the absolute difference in a channel gray level between adjacent pixels in the horizontal direction using said line pixel profile, said computed absolute difference constituting a plurality of data points;

ranking said data points in value;

dropping at least a top 1% of said ranked data points from consideration; and

picking a next top-valued data point as the photo sharpness figure of merit.

7.   The method of claim 6 further comprising:

transforming the captured image from RGB color space into YCrCb color space.

8.   The method of claim 6 further comprising:

transforming the captured image from RGB color space into L*a*b* color space.

9.   The method of claim 2 wherein the checking step comprises:

computing a magnitude of a two-dimensional gradient of a channel; and

picking a maximum two-dimensional gradient magnitude as the photo sharpness figure of merit.

10.   The method of claim 9 further comprising:

transforming the captured image from RGB color space into YCrCb color space.

11.   The method of claim 9 further comprising:

transforming the captured image from RGB color space into L*a*b* color space.

12.   The method of claim 2 wherein the checking step comprises:

computing a magnitude of a two-dimensional gradient of a channel, said computed two-dimensional gradient magnitude constituting a plurality of data points;

ranking said data points in value;

dropping at least a top 1% of said ranked data points from consideration; and

picking a next top-valued data point as the photo sharpness figure of merit.

13.   The method of claim 12 further comprising:

transforming the captured image from RGB color space into YCrCb color space.

14.   The method of claim 1 wherein said checking step further comprises:

computing a face quality figure of merit for the captured image; and

comparing said computed face quality figure of merit to a threshold to determine if said face quality figure of merit exceeds said threshold.

15. The method of claim 14 wherein computing step comprises:

detecting facial image data from the captured image; and

converting said detected facial image data from RGB color space into L*a*b* color space.

16. The method of claim 15 further comprising:

computing the mean of L* to obtain a brightness figure of merit.

determining if said brightness figure of merit falls within a brightness threshold range.

17. The method of claim 15 further comprising:

computing the local standard deviation of L* to obtain a noise figure of merit; and

determining if said noise figure of merit exceeds a noise threshold.

18. The method of claim 15 further comprising:

computing the overall standard deviation of L* to obtain a contrast figure of merit; and

determining if said contrast figure of merit falls within a contrast threshold range.

19. The method of claim 14 wherein computing step comprises:

detecting facial image data from the captured image; and

converting said detected facial image data into a binary mask of only white and black pixels, wherein said white pixels represent pixels of red color and said black pixels represent pixels of colors other than red; and

checking said binary mask for presence of white pixels.

20. The method of claim 1 wherein said checking step comprises:

computing a flare figure of merit for the captured image;

comparing said computed flare figure of merit to a threshold to determine if said flare figure of merit exceeds said threshold; and

providing a corresponding flare feedback to said camera user.

21. The method of claim 20 wherein the computing step comprises:

generating a binary mapping of the captured image containing only black and white pixels, said white pixels representing saturated pixels of the captured image; and

subdividing said binary mapping into a plurality of regions.

22.   The method of claim 21 further comprising:

computing a percentage of white pixels in each region to obtain a flare figure of merit; and

determining if said flare figure of merit in at least one region exceeds a flare threshold.

23.   The method of claim 22 wherein said flare threshold is at least 50%.

24.   A method for assessing the photo quality of a captured image in a digital camera, said method comprising the steps of:

computing, in-camera, a photo sharpness figure of merit for the captured image;

comparing, in-camera, said computed photo sharpness figure of merit to a threshold to determine if said photo sharpness figure of merit exceeds said threshold;

providing a corresponding photo sharpness feedback to a camera user;

computing, in-camera, a face quality figure of merit for the captured image;

comparing, in-camera, said computed face quality figure of merit to a threshold to determine if said face quality figure of merit exceeds said threshold;

providing a corresponding face quality feedback to said camera user;

computing, in-camera, a flare figure of merit for the captured image;

comparing, in-camera, said computed flare figure of merit to a threshold to determine if said flare figure of merit exceeds said threshold; and

providing a corresponding flare feedback to said camera user.

25.   A system for assessing the photo quality of a captured image in a digital camera, said system comprising:

an image capture unit;

an image processor operatively coupled to said image capture unit for processing the captured image;

a photo quality check unit operatively coupled to said image processor for checking, in-camera, the photo quality of the processed image; and

a display operatively coupled to said photo quality check unit for providing a corresponding photo quality feedback to a camera user.

26. The system of Claim 25, wherein said photo quality check unit comprises:

a photo sharpness check module operatively coupled between said image processor and said display for checking in-camera the photo sharpness of the processed image;

a face quality check module operatively coupled between said image processor and said display for checking in-camera the face quality of the processed image; and

a flare check module operatively coupled between said image processor and said display for checking in-camera the processed image for presence of flare.